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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/621,713	07/17/2003	Robert V. Walsh	5353	1542	
7590 01/24/2005			EXAM	EXAMINER	
John E. Vick, Jr.			MUROMOTO JR, ROBERT H		
Legal Departme PO Box 1926	ent, M-495		ART UNIT	PAPER NUMBER	
Spartanburg, SC 29304			3765	-	
			DATE MAILED: 01/24/200:	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/621,713	WALSH ET AL.			
Office Action Summary	Examiner	Art Unit			
	Robert H Muromoto, Jr.	3765			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the co	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	within the statutory minimum of thirty (30) days a reply and will expire SIX (6) MONTHS from to cause the application to become ABANDONED	will be considered timely. he mailing date of this communication. (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 17 Ju	ly 2003.	•			
·— · ·	action is non-final.				
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1,2,4,5 and 14-16 is/are rejected. 7) Claim(s) 3,6-13 and 17-20 is/are objected to. 8) Claim(s) are subject to restriction and/or 					
Application Papers					
9) The specification is objected to by the Examiner	•				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
	armiler. Note the attached Office i	ACTION OF TOTAL .			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of 	have been received. have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage			
Attachment(s)	4) 🔲 lataa da O	DTO 442)			
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7/17/2003</u>. 	4) Interview Summary (Paper No(s)/Mail Dai 5) Notice of Informal Pa 6) Other:	•			

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear how the "bias direction" of the airbag can be "perpendicular" to the warp yarns. A configuration where the "bias direction" is perpendicular to the warp would no longer be considered biased. The general definition of bias, in this context, refers to any oblique or slanting line. So the configuration stated by claims 5 and 16, is confusing as the stated condition would no longer be considered to be "biased".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson '477.

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Robertson teaches "an inflatable restraint cushion for use on the passenger <u>side</u> of a motor vehicle formed by folding and seaming a material blank of textile fabric such that the seams enclosing the impact portion of the cushion are disposed substantially along the <u>bias</u> of the base fabric forming the cushion (col. 2, lines 33-39)."

"In accordance with an aspect of the present invention, the precut blank of material 10 as illustrated in FIGS. 1 and 5 and folded in accordance with FIGS. 6 and 7 may also be used as the body portion of a passenger's <u>side</u> frontal impact cushion by the addition of impact panels of extremely simple geometric configurations which preferably are characterized by substantially straight line configurations. Accordingly, if a vehicle is to utilize any combination of a frontal impact cushion, a <u>side curtain</u> cushion or a hip and torso protection cushion, a common precut blank of material 10 may be utilized in the manufacturing process thereby providing an opportunity to reduce complexity and overall cost of the total safety system (col. 7, line 35-48)."

"One possible layout for the precut material blank 110 is illustrated in FIG. 14E showing the utilization of base material when a single piece fabric blank is utilized. In a potentially preferred arrangement, fabric utilization efficiencies may be raised to nearly 100 percent if the operator is willing to utilize a two piece fabric blank incorporating separately cut segments 190, 192 as shown in FIG. 14F (col. 8, line 66- col. 9, line 5)."

"As will be noted by the skilled artisan, aside from the benefits of material utilization and seaming efficiency, the above described embodiments

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have the additional benefit of providing a seaming arrangement which permits
the seams enclosing the impact portion of the cushions to be placed
substantially along the bias of any base textile fabric which may be used to
form the material blank 10, 110, 210, 310 from which the cushion is formed.

That is, the material blank may be cut and folded such that the load bearing
seams (ex. 220, 221, 226, 324, 330, 332) tend to run along lines approximately
at a 45 degree angle to the primary yam directions. Such an arrangement is
believed to increase the strength of the resulting cushion, thereby permitting
lower weight fabrics incorporating yams having relatively low linear densities
of about 210 to 315 denier or lower to be utilized with no adverse impact on
performance (col.10, .ines 46-61)."

These citations taken directly from Robertson teach essentially all the limitations of the claims listed above. The only limitation not specifically stated in Robertson is that the airbag is woven having an orientation that is biased to the warp. Although the instant invention claims the airbags are "woven" in a bias direction, it is clear from the specification and drawings that the airbag fabric is woven and then the airbags are cut from the fabric in a bias direction with respect to the warp. This arrangement and cutting of the airbags from the fabrics on the bias direction is considered to be equivalent to the arrangement of the textile blanks as recited in Robertson.

Robertson has also taught that, "such an arrangement is believed to increase the strength of the resulting cushion, thereby permitting lower weight fabrics incorporating yams having relatively low linear densities

of about 210 to 315 denier or lower to be utilized with no adverse impact on performance (col.10, .ines 46-61)."

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to weave side curtain airbags in which the longest dimenstion of the airbag is arranged bias to the warp direction to increase the strength, thereby permitting lower weight fabrics with no adverse impact on performance.

Allowable Subject Matter

Claims 3, 6-13, and 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References teaching airbag fabrics have been cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H Muromoto, Jr. whose telephone number is 703-306-5503. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on 703-305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bobby Muromoto

Patent examiner

1/12/2005